WE CLAIM:

1. In a wireless local area network wherein mobile units receive beacon signals from access points and associate with access points for data communications therewith, a method for controlling transmitter power level of a mobile unit, comprising transmitting from an access point to said mobile unit data representing transmitter power level for said access point; receiving at said mobile unit said access point transmitter power level data; and adjusting transmitter power level of said mobile unit in accordance with the value of said access point transmitter power level data.

2. A method according to Claim 1 wherein adjusting power level of said mobile unit comprises setting said mobile unit to a power level corresponding to said access point transmitter power level data.

3. A method according to Claim 1 wherein adjusting power level of said mobile unit comprises setting said mobile unit to a power level a selected amount greater than a power level corresponding to said access point transmitter power level data.

4. A method according to Claim 1 wherein said access point transmitter power level data is transmitted as part of said beacon signal.

5. A method according to Claim 1 wherein said adjusting power level of said mobile unit is performed when said mobile unit associates with an access point.

6. A mobile unit for use in a wireless local area network having access points transmitting at different power levels, comprising:

a receiver for receiving data signals from said access points;

a transmitter responsive to transmitter power level signals to transmit at a selected power level corresponding to said signals; and

a processor, coupled to receive data signals from said receiver and programmed to derive power level data from signals received from said access points and to provide corresponding power level signals to said transmitter.

7. A mobile unit as specified in Claim 6 wherein said processor is further programmed to provide maximum power level signals to said transmitter when said processor fails to derive said power level data from said received signals.

8. A method for controlling interference in a wireless local area network having access points and mobile units, comprising:

providing access points including access points with adjustable transmitter power level and distributing said access points over an area with varying spacing between access points;

adjusting the transmitter power of said adjustable transmitter power level access points according to said access point spacing, wherein access points with greater spacing have greater transmitter power;

providing power level data representing transmitter power of said adjustable power level access points, and transmitting said power level data from each of said adjustable power level access points;

providing mobile units having transmitters responsive to power level signals for adjusting transmitter power of said mobile units;

receiving said power level data at said mobile units and providing power level signal corresponding thereto to said mobile unit transmitters.

9. A method to Claim 8 wherein said power level data signals represent the same power level as said power level data

10. A method according to Claim 8 wherein said power level data signals represent a power level greater than the power level represented by said power level data.

11. A method according to Claim 8 wherein said access points transmit beacon signals for use by mobile units to associate with one of said access points, and wherein said power level data is transmitted with said beacon signals.

12. A method according to Claim 11 wherein said power level signals are provided to said mobile unit transmitter while said mobile unit is associating with an access point.

13. A method according to Claim 8 comprising the further step of providing maximum power level signals to said mobile unit transmitter when said mobile unit does not receive said power level data.